**LESSON PLAN**

**CONTENT AREA: Algebra 1 Honors** **NAMES**: Emily Wilson

**GRADE LEVEL:** 9

**TITLE or TOPIC:** Factoring Trinomials with the form

**NEXT GENERATION SUNSHINE STATE STANDARDS:** MA.912.A.4.3: Factor polynomial expressions

**UNIT:** Polynomials

**GOAL:** Students will understand how to factor trinomials.

**OBJECTIVE:** Students will factor trinomials with the form

**MATERIALS:** document camera, projector, textbook

**PROCEDURES:**

1. Teacher will review with students how to multiply binomials with the form (x+d)(x+f).
2. Teacher will have students look for patterns on what they notice about their answers in comparison to the original binomials they multiplied. Teacher will guide students to recognize that “c” is always the product of d and f and b is always the sum of dx and fx.
3. Teacher will review that factoring is undoing multiplication. Teacher will talk with students about how if “c” is positive then “d” and “f” will have to have the same signs since the product of two numbers with the same signs is positive and if “c” is negative then “d” and “f” will have to have different signs. Teacher will also talk about how to find what the signs are depending on the sign of “b” in the original polynomial that is being factored.
4. Teacher will give practice problems and will talk through these problems with students guiding them through the “factoring question”: What two numbers have a product of “c” and a sum of “b”?

Sample problems:

**EVALUATION:** Students will do practice homework problems. Students will work with partners the next day to practice this skill more. Teacher will circulate to assist students. Students will take a test at the end of the unit.

**ACCOMODATIONS:**

To accommodate students with different learning styles all directions and notes are given visually on the document camera and auditorily through teacher directions. Students also have access to an online textbook with visual examples and animated demonstrations of sample problems.. Students with a lack of reasoning skills will not have to be concerned with falling behind with the lack of reasoning skills because the teacher will lead the discussion and guide the reasoning process through think-alouds and written notes.